

REMARKS/ARGUMENTS:

The claims are provided as a convenience to the Examiner.

In the final Office Action dated February 24, 2004, the Examiner has finally rejected claims 1-2, 4-6, 11, 21, 23, and 25-29 under 35 USC §102(b) as being anticipated by International Publication Number WO 95/04419 to Cullen (hereinafter, Cullen). The Examiner has also rejected under 35 USC §103(a) claims 3, 7-8, and 24 over Cullen in view of U.S. Patent No. 5,594,949 to Andersson et al. (hereinafter, Andersson); claims 9-10, 18-20, 22 and 30 over Cullen in view of U.S. Patent No. 5,267,261 to Blakeney, II et al. (hereinafter, Blakeney II); and claims 12-17 over Cullen in view of U.S. Patent No. 6,009,328 to Muszynski (hereinafter, Muszynski). The Examiner further rejected, under 35 USC §112, first paragraph, claims 31-37 which were added in the Applicant's previous response dated November 14, 2003. These rejections are respectfully disagreed with, and are traversed below.

As an initial matter, Applicant submits that claims 31-37 meet the requirements of 35 USC §112, first paragraph, in that they are supported in the originally filed application at least as follows: claim 31 at page 5, lines 1-5; claims 32 and 35 at page 18 lines 17-19; claim 33 at page 17 line 30 to page 18 line 2; claim 34 at page 18 lines 26-37; and claim 37 at page 18 line 26 to page 19 line 8. Claim 36 draws support from method claim 9, adapted to the mobile station.

Applicant disagrees with portions of the Examiner's characterization of two references: Cullen and Blakeney II. These are summarized and applied against the claims below. Claims 1, 2, 26, 27, 28, 29, 33, 34, and 37 are independent.

Cullen Overview: Cullen relates to measurement architecture for a telecommunications system, and specifically describes a system wherein an intelligent processing unit 5 instructs measuring units 4a-d to send desired data to a data processing unit that can then average and compare the data obtained from different measuring units. The data of the processing unit output is subsequently used in some network operating function, e.g. hand over control. Cullen discloses that a) there may be many measuring units; b) measuring units may measure many properties of carried data; c) the measuring units can send data

on request and also continuously over an asked interval; and d) one possible signal property is signal quality.

Broadly Different Approaches to Solve the Problem:

All intelligence in the Cullen measurement system appears to reside in the processing unit 5, which Cullen universally describes as the network apart from the measuring units. This view is consistent among the drawings, claims, and most particularly in the explicit distinction between functional elements and application process control elements. Cullen defines at page 1, lines 9-25 that functional elements perform low-level functions such as switching not requiring concerted action, and distinguishes them from an application process control which is concentrated, performs high-level functions, and controls a number of functional elements. In each of Figures 2, 3, and 5-7 of Cullen, the measuring unit(s) 4/4a-d is/are explicitly labelled with some variant of the term “functional element”, and all are controlled by a single and separate control unit 5 (divided in Figures 5-7 as reference numbers 10-12). Cullen necessarily relies on the process control element to *order* measurement reports from each functional measurement element. Claim 1 and 29 recite differently (claim 1 quoted); “determining by the mobile station a plurality of independent measurement report triggering conditions using the network defined parameters”. Where Cullen’s mobile stations robotically respond, claim 1 and 29 have the mobile station determining trigger conditions itself.

Specific Distinctions in the Claims:

1. Cullen is not seen to disclose that the mobile station monitors a plurality of base stations (as recited in claim 1, 2, 27, 29, 34 and 37, and with slightly differing language in claim 33), but rather that a plurality of mobile stations monitor a single base station. This aspect is also recited in the preamble of claims 26 and 28, though the Applicant does not hereby assert that those preambles recite anything more than intended use/purpose of the invention.

Cullen recites at page 4, lines 23-25, that “The process control unit 5 is located in the base site controller 6, and is in communication with the measurement units 4a-4d.” Cullen’s singular pronoun “the” in reference to the process control unit 5 indicates that only one unit in the system has intelligence, consistent with Cullen’s definitions of process control and functional element and the figures. Cullen is not seen to teach elsewhere that more

than one control unit 5 may be within the measurement reporting system, nor the general proposition that intelligent processing relevant to his measurement reporting may be distributed. The Examiner's reference to Cullen at page 4, lines 1-3 (cited against claim 29) in fact teaches that the mobile measuring unit is active with only one base station. A closer reading shows that the two cited bearer links 3b and 3d of Cullen's Figure 1 are links coupling the MS 1 to the BSC 6 through only one BTS 2b. No active bearer link is shown in Figure 1 between the MS 1 and the remaining BTSs 2a and 2c of Figure 1. Cullen makes this explicit at page 4, line 3-5 that the respective links 3a and 3c (between the remaining BTSs and the BSC) are not currently carrying traffic to the MS 1. Cullen thereby forecloses the possibility of using his invention for what is now known as a soft handover, where a mobile station is in contact with two base stations concurrently while control changes between them; the related text and Figures enable only a hard handover, because the MS 1 of Cullen has no link with candidate BTSs 2a, 2c until handed over. The Examiner's citation to Cullen, page 4, lines 28-32 (against claims 1, 2, 26, 27 and 28) also describes each of a plurality of MSs monitoring only a single BTS, which cannot anticipate any single MS each monitoring a plurality of BTSs. Cullen therefore cannot anticipate claims 1, 2, 27, 29, 33, 34, or 37.

2. Cullen is not seen to disclose or teach a plurality of independent measurement report triggering conditions as recited in each independent claim save claim 37 (which recites trigger condition in the singular). Rather, Cullen is seen to teach that the measuring units/mobile stations report a measurement when directed by the network.

By the very language used, a triggering condition (e.g., upper and lower threshold values for a parameter; see application at page 5, lines 1-2) cannot be conflated with a parameter that is to be measured (e.g., received power, averaging time; see application at page 7 line 33 to page 8 line 1). For the claims that separately recite triggering conditions and parameter (claims 1, 26, 28, 29, 33 and 37, of which the latter differentiates between a "parameter for triggering" and "a trigger condition"), Cullen is not seen to disclose triggering conditions separate from the parameter to be measured and reported. In this group of claims, the Examiner cites to Cullen page 4, lines 28-30 (against claim 1); page 9, lines 21-22 (against claims 26, 28); and page 4, lines 1-3 (against claim 29). In each instance, Cullen is seen to teach only the parameter to be measured with no threshold that

would trigger sending of a measurement report (“eg BER, C/I, received power level or bit rate”).

Additionally, as noted above, claims 1 and 29 each recite that the mobile station determine (or have means for determining) the independent triggering conditions using the received parameters. Cullen is not seen to include teachings relevant to the above particular aspect of those claims.

Cullen recites at page 4, lines 28-32, that “The process control unit 5 *instructs the measurement units 4a, 4b, 4c, 4d to take measurements* of link performance eg BER, C/I, received power or bit rate. These units may collect continuously, or may *only* do so in response to a signal from the process controller 5.” (emphasis added). This explicitly recites that even the taking of measurements is directed by the control unit 5. Cullen teaches at page 5, lines 21-28: “As the measurement process control unit 5 is located in the base site controller 6, *measurement collection control is performed at as low a level in the network as possible*, whilst minimizing the processing power in the base stations 2a-2c themselves.” Cullen thereby explicitly teaches that it is not possible to devolve control over measurement collection lower than the BSC 6, yet claims 1 and 29 have the mobile stations exercising exactly that control by determining the trigger conditions by which reports are sent.

Blakeney II: While every independent claim is rejected as anticipated by Cullen, Applicant takes this opportunity to characterize Blakeney II also. Blakeney II is not seen to disclose a plurality of independent measurement report triggering conditions, but rather only power-based parameters and predetermined levels that are sent to a mobile station. Blakeney II is seen to teach that a mobile station reports when a criterion is met, but not a plurality of independent trigger conditions and especially not trigger conditions determined in the mobile station.

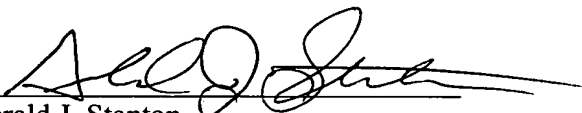
Specifically, Blakeney II is found to lack any teaching regarding offset values to verify whether to send a report as in claims 9-10. The Examiner appears to consider a phase offset, which Blakeney II uses to distinguish competing pilot signals from different base stations, as an offset value that may be used to verify whether to send a measurement report. The juxtaposition is not understood. To use a phase offset as a verification means

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for sending a report necessarily implies that the phase offset changes for that purpose, to distinguish between, for example, 'verified' and 'not verified' states. But the phase cannot change for that purpose, because it is only the phase offset that separates the competing signals of different base stations in Blakeney II; the competing signals use identical PN codes. In short, the phase relation may be used for distinguishing competing base station signals or possibly for another separate purpose, but not both. Nearly all of the present claims recite that a mobile station monitor a plurality of base stations, so some means must remain to distinguish those base station signals to maintain the rejection. Even assuming without admitting that Blakeney II teaches another means may be used to distinguish competing base station signals in order to free phase offset for use as a verification means, it is not seen how phase offset might be used to verify whether a triggering condition has been met as in claim 9. Elaboration is respectfully requested.

The above is not exhaustive of the Applicant's patentability arguments, but sets forth the clearest distinctions between the independent claims and the references. Applicant is aware that the outstanding Office Action is final, but fervently believes that the rejections are improper. The Examiner is respectfully requested to review the references anew in light of the above detailed remarks, and reconsider the merits of the rejections. The undersigned welcomes the opportunity to discuss any matter or resolve any lack of clarity via teleconference at the Examiner's discretion.

Respectfully submitted:


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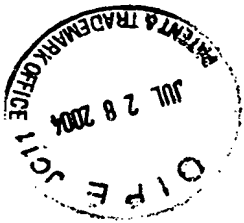
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Date

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